Abstract ID: ASRS2018 – 02

INFLUENCES OF CONSUMER PRICE INDEX AND GROSS DOMESTIC SAVING ON SRI LANKAN ECONOMY: A JOHANSEN CO-INTEGRATION TACTIC

Aboobucker Haalisha and Aboobucker Jahufer*

1.2Department of Mathematical Sciences, Faculty of Applied Sciences, South Eastern University of Sri Lanka.
*jahufer@seu.ac.lk

An essential aim for any emerging country like Sri Lanka is to achieve great economic development. Even though there are several factors that have an effect on economic growth (GDP), this paper primarily focuses on Consumer Price Index (CPI) and Gross Domestic Saving (GDS) in Sri Lanka, founded on the yearly time series data for the period of 1960 - 2016 gotten from the Annual Report of World Bank Economic Indicators and Annual Report of Central Bank of Sri Lanka. As these are the time series variables with its precision, the stationarity among the three variables (GDP, CPI, and GDS) was examined by utilizing the Augmented Dickey Fuller unit root test at 5% significance level. The presence of cointegration of the variables was confirmed by the Johansen Co-integration test and then the short-run or long-run association between the variables was evaluated by Vector Error Correction (VEC) test. The causal relationships among the variables were tested with Granger Causality test. The observed results of this study expose that all the variables have unit root problem at level, but convert stationary after first differencing. The results of Johansen Co-integration experiments designate single co-integration equation whereas the VEC test praises no short-run relationship among the variables while the presence of a longrun relationship. Consistently Granger causality test shows a unidirectional causality drive from GDP to GDS. Model adequacy tests were enforced on the residuals of the VECM comments that there is no heteroscedasticity, no serial correlation, and are normally distributed suggesting that the model is good enough. This study gratifies a prominent requirement of how CPI and GDS sustenance for economic growth.

Keywords: Co-integration, Consumer Price Index, Correction Model, Gross Domestic Product, Sri Lanka, Vector Error

^{*}Corresponding Author